Citizen Surveys: Taking Your Community’s Pulse

by Thomas I. Miller, Ph.D.

No planning department worth its salt creates or significantly alters a master plan, design guidelines, or zoning without input from the community. Numerous opportunities for input are often provided: forums held in every neighborhood; well-publicized community-wide meetings; call-in radio or cable shows; newspaper clip-outs.

In many communities, however, it is not uncommon to find the same relatively small group of people attending each of the forums, traveling from place to place like a progressive dinner feeding on the soup of local politics. A town meeting about a re-zoning that finds 100 in attendance out of 100,000 in the community nevertheless makes everyone feel terrific because “there was such enthusiasm shown by participants” or “the vision of residents was clearly expressed in fifteen breakout groups” or “a wide cross-section of our community came to listen and speak.”

Despite the public back patting for having done so well in the citizen input arena, many elected officials and board members are nagged by self-doubt about the real success of their “citizen involvement” efforts. Although they have cast their net widely, providing genuine and sincere opportunities for citizen participation, they know that the citizens who are most often snagged into participating are those with the greatest passion, the most time, the least reserve, and the most at stake. They wonder if the viewpoints of families with children; wage-earners steeped in the daily pressures of making ends meet; and sick or handicapped residents were adequately considered.

The Merits of Citizen Surveys

A growing number of communities are augmenting traditional meetings and forums with citizen surveys. Surveys are far more successful in capturing the typical community resident and making that resident’s opinion part of the community calculus.

A scientifically conducted survey of residents brings in the voice of the public like no forum, newspaper straw poll, or focused discussion. Whether conducted by phone or mail, a good citizen survey will provide the perspective of residents who are not the “usual suspects.” Our research demonstrates that 80 to 85 percent of survey respondents report not having attended any community meeting or watched a council meeting on television in the prior twelve months.

Citizen surveys can be simple one-shot assessments of resident policy preferences. More valuable, however, is a citizen survey program — with periodic public surveys designed to track changing community demographics; evaluate quality of life and quality of community services; and measure the extent to which various community facilities and programs are being used. A recent survey conducted for the International City/County Management Association estimated that almost two-thirds of all jurisdictions with over 25,000 population had conducted a citizen survey in the six year period between 1993 and 1998 and close to forty percent had conducted at least two.

The citizen survey, conducted by those savvy enough to do it right, provides elected officials and planning board members an uncommonly high resolution close-up of the face of the community.

Citizen Surveys in Support of Planning

Many different types of surveys can be used to assist in community planning. From general to specific, surveys can address topics such as quality of life; attitudes toward growth; transportation habits; park and recreation preferences; and economic development.

Quality of Life

In support of comprehensive plan updates, citizen surveys often include a set of general questions about the quality of life in the community and in neighborhoods. Questions may deal with residents’ perceptions about the community as a place to raise children or as a place to retire, and opportunities for shopping, dining, volunteering, adult education, and entertainment. Other general quality of life questions may ask about residents’ feelings of safety in the community or their opinions about racial harmony.

These kinds of questions can help create a baseline of information to be monitored as land use decisions are made over the years. Furthermore, if done correctly, the survey can provide results for different parts of the community so that better facility and policy targeting can occur.

Growth Management

Many communities can benefit from understanding how residents feel about the kind and amount of growth they desire, and what type of growth management tools (if any) they would support.

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Questions about the rate of residential, retail, and job growth can help distinguish residents’ perceptions about these different kinds of growth. Furthermore, residents may be more concerned about some negative impacts of growth than others. Surveys can pinpoint this, and tell policymakers, for example, the degree to which residents are concerned about air pollution, traffic congestion, increased housing costs, decreased community diversity, degradation of streams, increased noise, or the “look” of sprawl.

**Transit Planning**

Many communities are authoring transportation master plans or creating plans to enhance the use of travel modes other than the single-occupancy vehicle. As part of this planning effort, staff and boards need to understand the current mix of travel choices and the kinds of incentives and disincentives likely to motivate residents to choose different modes of travel.

Transit planning surveys often require that household members be recruited to maintain diaries of their travel behavior and complete a survey about the key circumstances that motivated their selection of travel mode. Sometimes on-the-spot surveys (called intercepts) are conducted among downtown pedestrians, motorists, or bus riders to determine why they decided to walk, drive, or take the bus.

**Park and Recreation Planning**

Park and recreation planning often requires assessment of current facilities and programs, as well as determination of the desirability of various park and recreational enhancements. Sometimes residents are asked if they would be willing to pay for specified services (through taxes or fees) and what amounts they would consider reasonable. Often residents are asked how frequently they have visited or used various recreational amenities.

**Economic Development**

A citizen survey can address one of the central concerns in economic development — the extent to which residents shop or commute to jobs outside the city. By determining where residents shop for various consumer items, it is possible to craft a strategy to attract potential retailers in categories where retail sales tax “leakage” is especially pronounced. By asking residents where they work, it is possible to track the changing strength of a community’s employment base.

“**RULES**” FOR COMPLETING A CITIZEN SURVEY

Successfully completing a citizen survey is actually not as difficult as it might first seem. The key is to follow a logical series of steps:

1. **Identify why a survey is needed and what it is intended to do.**
2. **Determine how much your community is willing (able) to spend on the survey.**
3. **Put a team in place to analyze the results when they come back.**
4. **Identify the target population and sample.**
5. **Determine how many people should be surveyed, and how to reach them.**
6. **Ask the right questions in the right way.**
7. **Ask the right person.**
8. **Test the survey and adjust if necessary.**
9. **Conduct the survey, check for bias, and interpret the results.**

“**What do we want to learn?”** By developing a statement that clearly explains why the survey is being undertaken, the community will have a much easier time planning the survey, analyzing responses, and disseminating the results.

Part of being able to answer “What do we want to learn” is having an idea of how the results of the survey will be used. Generally speaking, citizens will respond energetically to surveys that will be used to guide the development of projects, evaluate programs, and prioritize expenditures. When the results of a survey indicate overwhelming public support for a particular course of action, the sponsoring agency or governmental body should be prepared to take steps to implement that course of action.

2. **Determine How Much Your Community Can Spend**

If money ran from the tap like water, there would be no need to select a sample of residents to participate in your survey. Instead, you would conduct a census, tracking down the opinion of each and every qualified resident. Surveys always represent a compromise between precision and possibility. Budgets generally exclude the value of staff or volunteer time but, if you can, it is wise to know the complete cost of doing a survey. These days a scientific survey tends to cost between $8,000 and $15,000 for the basics. Hiring a Consultant: Factors to Consider.

3. **Put a Team in Place to Analyze the Results**

It may seem too early in the process to be worrying about what to do when the survey is complete, especially when you haven’t even constructed the data collection instrument yet. Nevertheless, the weak link in survey research is almost invariably the use to which results are put.

Identify a panel of staff and citizens who are charged with making recommendations to the planning director, city manager, or city council about the meaning and use of the results. Let the panel members know that they will be expected...
to determine if the results merit nothing more than “watchful waiting” or if action is required. While the panel will be advisory in nature, members will need to be prepared to justify their recommendations by reference to the survey results and, perhaps, other sources.

Meaning Comes From Comparison, p. 12

4. Identify the Target Population and Sample

Opinion surveys are attractive planning tools because, when properly done, they provide an efficient way to collect information about a community. This is because surveys generally focus on small, but representative, samples of the entire community. In fact, the most crucial issue related to survey samples is how well they represent the overall population or community of interest — the “target population.”

A representative sample identifies potential respondents in a way that does not systematically exclude any group from the community. For example, if Latinos comprise ten percent of your community’s population, they should also make up about ten percent of your survey respondents. A representative sample is drawn from a “sampling frame,” which is a complete list or representation of everyone in a target population who could be surveyed. (A voter registration list is the sampling frame for a survey of registered voters; a list of phone numbers generated at random is the sampling frame for a survey of everyone in the community with a telephone).

Constructing a sampling frame can be relatively straightforward, or it can be difficult, depending on the target population. The sampling frame for a target population of parents of children in public recreation programs could most likely be constructed in-house. A telephone directory would likely provide a complete list of the target population (all parents with children under 16 years of age). Often, however, the sampling frame will need to be purchased from commercial sources or acquired in some other manner. The size of the target population is important as smaller samples will be needed for larger populations. In general, samples of about 500 respondents are high enough to ensure that useful results can be obtained.

The decision to conduct a survey should not be taken lightly. Questions to consider when making this decision include the following: Who will oversee the development and administration of the survey? Do the people who might work on the survey have the right expertise? Do they have enough time available? And, finally, have funds been budgeted to obtain outside expertise where needed?

The “ownership” of the survey is also important. The more those who may be affected by the survey results feel “connected” to the survey during its design, the more likely they will accept recommendations based on the survey’s results.

Not every community will want to conduct a survey on its own, or feel capable of doing so. These communities can get help from private consultants, universities, and/or organizations such as regional planning agencies. Most communities use consultants to conduct their surveys.

Once the decision to hire a consultant has been made, the next issue is “which consultant?” Your consultant should be:
1. Someone who understands you — and whom you understand.
2. Someone who can work with diverse groups and who can explain the benefits and limitations of various survey research methods.

The larger the size of your survey sample, the greater the likelihood it will match the target population. However, once the sample size reaches 400 to 500, the increases in precision and accuracy are marginal. Unless statistically significant results from a specific subgroup of the population are needed, sample sizes in this range will suffice for most purposes because the margin of error (i.e., confidence interval) remains at about plus or minus 5 percentage points around any percent. See also Sidebar, Who to Include in the Sample, p. 13.

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Confidence Intervals by Size of Sample

Percentage of a sample answering yes/no

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Observation: “We have had the experience of very professional, creditable polls being dismissed by public policy makers because they were funded by business groups strongly aligned with one side of a major controversy. Even though the surveys themselves were totally ethical and technically unbiased, the results were disregarded simply because of who picked up the tab.”

— Wayne Lemmon, Silver Spring, Maryland (Lemmon is a real estate economist, and also serves on the Planning Commissioners Journal’s editorial advisory board).

3. A good writer and a clear speaker.
4. Someone who can explain the 95 percent confidence interval.
5. Someone who will challenge the usefulness of questions.
6. Someone who can tell you how to check and control for non-response bias.
7. Someone who can accomplish statistical re-weighting of the sample.
8. Someone who won’t insist on highlighting all statistically significant differences if they don’t matter.
9. Someone who can get the right descriptive statistics out of a computer.
10. Someone who knows the difference between a pretty graph and a clear graph.
11. Someone who is willing to document meticulously all survey research methods.
12. Someone who is willing to take pieces of the project, if you are planning to handle some of it in-house. — T.I.M.
developed using recreation department program registration records. A sampling frame for members of the community who are over 60 years old, on the other hand, might have to be compiled using telephone directories, property tax records, utility records, commercial mailing lists, and motor vehicle registration. For reasons of practicality, it is not uncommon to define sampling frames by the information that is available.

5. Determine the Size of the Survey Sample—and How Best to Reach those in the Sample

The primary purpose of a sampling frame is to identify individuals who actually could be surveyed, since well constructed samples allow us to survey a relative few from the target population. Those individuals who are selected to be surveyed are part of the survey sample. People in a sample serve, essentially, as tokens representing a larger number of people. By using random selection to identify those in the survey sample, it is possible to generalize survey results and apply them to a target population as a whole.

Drawing a sample from a sampling frame is usually done after considering the margin of error and the budget. The margin of error (also referred to as a “confidence interval” by statisticians) tells how closely a sample is likely to reflect a target population. Most communities demand that it be no larger than five percentage points around any percentage estimate.Margins of Error, p. 11

Before deciding on a specific method for conducting a survey, communities should consider the cost, speed, and accuracy of a range of alternatives. Standard options for conducting surveys include using mail out—mail back questionnaires, telephone interviews, and in-person interviews. Other options include publishing surveys in newspapers, distributing them as inserts with utility bills, and “doorknob drops.” While inserting a survey in a newspaper or utility bill may be relatively simple to do, the results will generally be less reliable and accurate than if a more targeted mail or telephone survey (or conducting in-person interviews) were used. As accuracy is the “touchstone” of survey sampling excellence, it is preferable to use methods where the surveyor has more control over who is surveyed and is in a position to obtain a higher response rate. Indeed, the bias introduced by lack of response can easily overwhelm bias introduced by all other factors combined, and must be minimized as much as possible.

So which method should communities use? The highest rates of response are typically achieved by in-person interviews. However, due to the high cost of this method, most surveyors today choose to use telephone or mail based methods. Our recent research shows that rates of response for mailed surveys (when done properly) have higher response rates than the typical phone survey. A mailed survey (including a pre-survey notification post card and two mailings of the survey) can net upwards of a 50 percent response rate, compared to about a 30 to 40 percent response rate from most phone surveys.

6. Ask the Right Questions in the Right Way

The heart of every survey is, of course, the questions it contains. That being the case, it really isn’t possible to overstate the importance of careful question selection and wording. Developing a solid questionnaire (sometimes called a survey “instrument”) is not a torturous task, however. All it takes is the application of a little common sense and attention to the principles of consistency, clarity, simplicity, and fairness.

In applying the principle of consistency, a surveyor needs to consider

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whether questions included in a survey will produce similar (consistent) responses from people who feel the same way about an issue and different responses from people who feel differently. Perhaps the easiest way to observe this principle is through the use of “forced choice” questions, which limit answers to a predetermined list or series. The principle of consistency is not being applied well if differences in survey responses are the result of different interpretations of what the questions mean. Unless they are worded very carefully, open ended questions — which do not require a choice from among a series of alternatives — can produce inconsistent answers (or at the very least hard to categorize) answers.

The principle of clarity can be respected by developing questions that do not contain vague wording, compound concepts (which combine multiple and possibly conflicting ideas into a single question), misleading assumptions (which assume circumstances that may not be true), and overlapping categories. Common words with vague meanings can be communication sinkholes. Terms like “income,” “frequently,” “transit,” “last year,” or “unemployed” do not mean the same thing to different people. When constructing a survey, a surveyor should replace them with more precise terms.

To achieve simplicity, a surveyor should develop questions that are specific, short, and logical. Specific questions give more reliable answers. Long questions decrease response rates. The overall number of questions that can be asked without driving away respondents depends on the survey method and topic. Generally, ten pages is considered a maximum for written questionnaires, while thirty minutes is the absolute limit for telephone surveys.

Fairness and neutrality are also important factors in survey design. Questions asked in a survey must be presented in a way that does not make any particular response appear most correct or obvious. Questions should have “option symmetry,” that is, when respondents are asked to rate performance or behavior, they should be presented with as many positive choices as negative ones, and individual options should mirror each other (e.g., very good / good / bad / very bad).

7. Ask the Right Person

A good survey instrument is of little practical benefit if it is used to obtain answers from respondents who do not fairly reflect the sampling frame. Once a surveyor has decided how residents will be contacted (e.g., by mail, phone, or in person), he or she can then “draw” a sample. For a mailed survey, address lists may be purchased from commercial address listing services. Before making a major purchase, it is usually a good idea to test a sample of the addresses supplied by the service to make sure they are accurate and include all units in multi-family dwellings.

Those creating a sample for a telephone survey can reasonably assume that the proportion of prefixes — the first three digits of a seven digit number — in a telephone book reflects their actual number among all telephones (whether listed or not). Thus, the phone book can be used to generate the sample of numbers by using “plus one dialing,” which involves adding one to the last digit of each phone number (changing 555-1234 to 555-1235, for example). This way, surveyors can ensure that unlisted phone numbers are as likely to be sampled as listed numbers.

Asking the “right” person also means finding the right member of a household to interview. If the choice of respondent is left up to the people in the household, the resulting

Who to Include in the Sample?

A sample should be large enough to represent the total community and any subgroups of interest in the community. At this point, stratification may make sense. Stratification means placing members of the population into groups. When membership in a group makes a difference in how members of that group will respond to survey questions (home owners versus renters, for example), then stratification can increase the precision of sample results.

When you want to be certain to have enough response from segments of the population that may not have many members in your sample, you will want to sample a disproportionately large number from that stratum. For example, if you survey 400 residents in a community with ten percent non-white population, and want to be sure you have enough response from non-whites, you need to “oversample” non-whites, assuring that 100 non-whites respond where only 40 would have been expected to respond by chance alone. Later, when you report the results for the entire community, they will need to be statistically re-weighted to give non-whites the appropriate ten percent weight (i.e., reflecting their proportion of the population). —T.I.M.
A scientifically-administered public opinion survey was an important part of the outreach process used to prepare a new master plan for Hunterdon County. The public opinion survey was a follow-up to an earlier County survey that had been distributed to municipal planning boards, environmental commissions, environmental organizations, and business associations. That survey had revealed many common concerns among municipalities in the County regarding the loss of community character, traffic increases, and loss of open space and farmland. However, it had not attempted to measure the opinions of the general public as a whole.

Before embarking on its public survey, County Planning Board staff consulted with polling professionals, particularly with regard to the phrasing of questions and selection of a mailing list. The survey was mailed out to 5,000 households. Names and addresses were drawn from a list of the County’s registered voters, because it was the best available database that included renters as well as homeowners. Households were randomly selected using a computer program.

A total of 2,251 surveys — a response rate of 45 percent — were returned. Planning Board Staff notes that the high response rate was likely due to a combination of the postage paid return envelope included with the survey and the public’s strong interest in the survey questions.

According to Linda Weber, Principal Planner for the Planning Board, “the public opinion survey added credibility to the County’s planning process. It sent a clear message that the County was seriously interested in hearing from the public. The survey also provided concrete, indisputable results that continue to be referred to in many of the County’s planning projects.”

For more information contact Linda Weber, AICP, Chief Planner, Hunterdon County Planning Board, at 908-788-1490; e-mail: lweber@co.hunterdon.nj.us.
responses on which they are based must reflect the target population. Consequently, before interpreting the results of a survey, a surveyor must calculate the rate of response for the survey, and check and correct for any non-response bias. To calculate the response rate for a telephone or in-person survey, a surveyor needs to track the number of attempts — usually a minimum of three with phone surveys and two with mail surveys — that are made to contact each person in the survey sample.

After quantifying the rate of response, the surveyor must attempt to discern any differences between those who responded to the survey and those who chose not to or could not be reached. If comparison with Census data suggests that there are significant differences between these two groups (for example, if demographic characteristics such as income, education levels, or race are dissimilar), it will be necessary to correct for the non-response. In some cases, such adjustments can be made by “re-weighting” (using statistics to increase or decrease the representation of various groups).

While it is true that much can be learned from mathematically intensive evaluation of survey results, most citizen surveys do not require fancy statistics. Results can usually be calculated by using widely available software programs that are designed to calculate medians, ranges, percentages, frequency distributions, and other measures. These programs will typically prepare extensive tables, as well as attractive charts and graphs.

Most of the software programs also present cross-tabulations of different responses and indicate which differences are statistically significant. Remember, though, that finding statistically significantly differences in the responses to a question doesn’t necessarily mean the differences are important. For example, with a large enough sample you may find that 82 percent of older residents want a flood plain ordinance but only 78 percent of younger residents do. This difference may be statistically significant, but without any policy relevance whatsoever.

When the survey results are in, it’s time to call back into action your advisory panel to analyze the results.

**Summing Up:**

More and more communities are using surveys to get a better sense of public opinion on a wide range of planning-related issues. Surveys are effective at reaching residents who do not ordinarily participate in typical “public involvement” events, such as meetings and forums.

For surveys to be of value, however, they need to be carefully prepared and administered. This includes clearly identifying just what the purpose of the survey is; identifying the target population and sample size; asking the right questions in the right way; and conducting the survey in a fair and unbiased manner.

Thomas I. Miller, Ph.D., is the President of National Research Center, Inc., a survey research firm located in Boulder, Colorado. An expert in research and evaluation methods, Miller is the co-author of Citizen Surveys: How to Do Them, How to Use Them, What They Mean, published by the International City/County Management Association in 1991 and scheduled for re-release later this year. His firm, which specializes in surveys that permit communities to compare their results with “peer” communities similar in size, maintains an integrated database of over 250 surveys completed by about a quarter of a million residents in 40 states. Miller would be pleased to respond to readers’ questions about the article, and can be reached at: 303-444-7863.

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The Tallahassee-Leon County Planning Department will be tracking public attitudes about growth, affordable housing, economic development, open space, and other issues through periodic public surveys. Following up on a 1996 survey conducted as part of the comprehensive plan process, the Department has received funding from the governing body to conduct biennial surveys beginning this year.

According to Planning Director Wendy Grey, the city felt it important to “reach folks who don’t come out to public hearings, the people who aren’t very involved or very vocal.” Grey notes that the 1996 survey (on which future opinion surveys will be modeled) brought in useful feedback on questions such as whether people were willing to pay for preserving more open space, and whether the pace of growth in the city was too fast or too slow.

Of special interest to planners, the survey also asked: “Do you know whether or not Tallahassee and Leon County have a Comprehensive Plan that’s designed to direct how this area grows and develops?” Just over two out of five local residents answered “yes” to this question (for low-income residents, only one out of five said “yes”).

The Planning Department hired a local firm specializing in survey work to conduct the 1996 telephone survey. A citizen panel may be formed to review questions to be asked in future surveys.

For more information contact Wendy Grey, Planning Director, Tallahassee-Leon County, at: 850-891-8633; e-mail: grey@mail.ci.tlh.fl.us